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## ***The Lexicon of Naval Tactics in Ramon Muntaner's Crònica*** **William Sa Yers**

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# THE LEXICON OF NAVAL TACTICS IN RAMON MUNTANER'S *CRÒNICA*

WILLIAM SAYERS

## ABSTRACT

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Common Romance terms underlie naval maneuvering in the thirteenth-century Mediterranean, although a distinctive Catalan vocabulary emerged early on. *Afrenellar* was used of linking galleys at stem and stern by cables in order to keep ships at a uniform distance. Historians have speculated that this notion of "bridling" was extended to oar handling. Galley oars would have been drawn in amidships, reversed, then extended to adjacent vessels and lashed in place to create impromptu fighting platforms and block the passage of enemy ships. Yet in the documented instances, the bridle or check in question is a simple device placed over the looms to hold the raised oar at a uniform height from the sea surface, prompting the Venetian image of a galley as a double comb. Historical speculation on the naval encounters of the War of the Sicilian Vespers must be informed by an accurate understanding of the technical vocabulary.

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In an influential article from 1983 on the naval battles (8 July 1283 to 14 June 1300) of Roger de Llúria (Roger of Lauria) during the War of the Sicilian Vespers, John H. Pryor begins with a vignette of the celebrated admiral positioning the Aragonese-Sicilian fleet at the entrance to the Grand Harbor of Malta, where a Provençal fleet of comparable size, in the service of Charles of Anjou, is at anchor.

Once inside the harbour mouth, Lauria bridled his galleys together with their oars lashed across from one to another so as to form an impenetrable line abreast across the exit from the harbour. (179)

Taken by surprise while asleep, the Provençals mount a disorganized defence and lose many men, first to the Catalans' crossbow-fire, "later in close hand-to-hand fighting when Lauria ordered his crews to cut the bridles and close" (179). This was Roger's first great triumph and we might think the description paradigmatic for the options available to the admiral and his tactical choices.

Later, in the body of the article, Pryor looks for Lauria's rationale in sounding a warning signal to the sleeping enemy fleet. This rationale momentarily aside, he expands on the above comments with greater detail on the deployment of the Aragonese fleet of galleys:

Nor could they [the Provençals] break through to the open sea and flee before the final phase of the battle because Lauria's bridled line of galleys formed an impenetrable line across the harbour mouth. This tactic, which may originally have been a Genoese innovation of the late twelfth or early thirteenth century, had become common by the time of the War of the Vespers. Cables, *frenella*, were passed from bow to bow and stern to stern of adjacent galleys and then the oars were reversed and the looms [handles] passed across from one to the other and lashed fast. ... Bridled together in such fashion, the galleys formed not so much a floating platform, for each galley could move independently with the waves, as rather an impenetrable floating barrier which prevented the enemy breaking the line at any point. This tactic would normally be used when adopting a defensive position or when trying to prevent the escape of an enemy, as at Malta. After the artillery phase of the battle was over and either one of the opposing fleets moved in to grapple, or else one attempted to flee and the other to pursue, the cables were cut loose and the oars freed. (188f.)

This may be called the received view of the battle of Malta and its underlying tactics, a view which has been confirmed in subsequent studies (Mott 2003).<sup>1</sup> But in Susan Rose's *Medieval Naval Warfare, 1000-1500*, published in 2002, a number of questions are raised. Rose concludes (47) that "it is hard to be sure what is meant by the 'lashing together' of galleys but it cannot have been any process which made it impossible to use the oars." The present article pursues the matters of bridled galleys and lashed oars and, in so doing, addresses such concerns as the emergence in Catalan of a more or less discrete vocabulary for naval tactics and ship-board maneuvers, the accuracy of received translations from Catalan, and the relative dependence of historians on original and translated sources, respectively.<sup>2</sup>

Ramon Muntaner wrote his *Crònica* in old age and it is of necessity marked by subjective recollection. Yet he was a principal in many of the events recounted there—the battle of Malta, the activities of the Grand Catalan Company in the eastern Mediterranean, in particular in the Morea in southern Greece. Thus, while we may question the author on points of historical detail, we may with confidence assume that his vocabulary accurately reflects the usage of the times, in particular as concerns nautical matters.<sup>3</sup> Muntaner's chronicle found a first modern edition in 1860 which was accompanied

1. Despite the promising title, "La marina mediterránea en la descripción de Ramon Muntaner," Metzeltin does not prove relevant to present concerns.

2. For an overview of the Catalan terminology for masts, sails (square and lateen), and standing and running rigging, see Jezegou. Iconographical evidence is cited, but etymologies, questions of possible loans and calques, etc. are not pursued.

3. The question of historical accuracy vs novelistic licence is treated in Sablonier. Despite the title, naval matters are not discussed.

by a translation into Castilian. Three excerpts now follow with key terminology italicized. Before an encounter between four Catalan-Aragonese galleys and ten from the kingdom of Morocco, Roger de Llúria's father-in-law, Corral Llança (Conrado Lansa), exhorts his crews and soldiers:

Per què jo us prec a cascuns que us membre lo poder de Déu e de madona santa Maria e la santa Fe catòlica e la honor del senyor rey e de la dita ciutat de València e de tot lo regne; e vigorosament tots, així com estan *affrenellades* totes quatre les galees, que firam, e vui en aquest dia façam tant que tots temps parlen de nós.<sup>4</sup>

On the key detail the Castilian translation reads: "así como nos hallamos, *amarradas entre sí* las cuatro galeras." In Lady Anna Kinsky Goodenough's translation of 1920-21, which first brought Muntaner's work to the attention of an English-language readership, we find "*roped together as we are*" (Muntaner 1920-21, Ch. 19, 51).

Some years later Roger de Llúria makes a similar deployment of the galleys of the Aragonese-Sicilian fleet before an encounter with the galleys of King Charles in the Gulf of Nicotera near the Straits of Messina (1282). Of the number and general disposition of the two fleets Muntaner writes:

E si em demanats quantes galees hi havia de cascun lloc, jo us ho diré: primerament hi havia vint galees de proençals, bé armades, e quinze galees de genoveses, e deu de pisans, e quaranta-e-cinc de Nàpols; e les barques e los llenys de la ribera de Principat e de Calàbria. Què us diré? Que tantost con l'estol del rei Carles fo davant Nicòtena, pensaren tuit de *desarborar*, es meseren-se en cuns de batalla. E les vint-e-dues galees foren a dos trets de ballesta prop d'ells, e així *mateix* *desarboraren*, e *escarpiren*, e llevaren d'estandart en la galea de l'almirall. E armaren-se tuit, e *enfrenellaren la una galea ab l'altra*; així que, totes vint-e-dues, *enfrenellades* e *embarbotades*, van vogar, aparellats de batalla, contra l'estol del rei Carles. E aquelles de l'estol del rei Carles no es podien pensar, per res, que haguessen cor que es combatessen, mas que s'en feessen afaenats. Mas, con veeren que a de veres se feia, les deu galees de pisans van eixir de l'*esquerra* e van *arborar*, e *en redon*, ab lo vent que era fresc, van-se metre en mar e pensaren de fugir. (Ch. 67, 719f.)

The Castilian and English translations, more summarily cited, have the following phrasing:

... Estaban ya las veinte y dos galeras á un tiro de ballesta, y *desarbolando* tambien, *hicieron zafarrancho* de combate, y plantaron el estandarte en la del

4. The passage is cited from Muntaner 1971, Ch. 19, 683. This edition differs only in a few details from the 1860 edition named above, Ch. 19, 39. Excerpts from the Castilian version that follows are cited from the latter, also given on 39.

almirante; amáronse todos luego, y *abarlovando una galera con otra*, de suerte que quedaban las veinte y dos *abarlovadas todas entre sí*, empezaron á bogar, dispuestos á la batalla, contra la armada del rey Cárlos. ... las diez galeras de pisanos saliéronse de la *línea*, *arbolaron*, y *añiéndolo el viento*, que era fresco, se hiciéron á la mar, y procuraron escapar. (Ch. 67, 117f.)

... And the twenty-two galleys were within a cross-bow shot and they also *unshipped their masts* and *cleared the decks* for action and hoisted the standard in the admiral's galley, and all armed themselves and *lashed every galley to the next*, so that all the twenty-two galleys, thus *lashed together and hauling the wind*, began to row towards the fleet of King Charles, ready for battle. ... the ten galleys of the Pisans left the *line* and *hoisted their masts* and, *hauling the wind* which was fresh, put out to sea and fled. (Ch. 67, 148)

A last excerpt shows Roger again adapting this tactic, after reconnoitering the Provençal fleet lying at anchor in the Grand Harbour of Malta. At dawn on 8 July 1283, Roger elects to waken the sleeping enemy crews rather than launch a surprise attack.

E açò senyaladament l'almirall féu con era la primera batalla que ell feia depuis fo fet almirall, e així, que volia mostrar son ardiment, e la proea de la bona gent qui era ab ell. E féu tocar les trompes e les nácares, e començaren a entrar *esquerra feta* per lo port, totes *enfrenellades les unes ab les altres*. E los proençals despertaren-se a mal son; e tantost l'almirall, *lleuant rem*s adés adés, lleixà'ls guarnir e aparellar. (Ch. 83, 736)

In Castilian: "*en línea*, empezaron á entrar en el puerto, *abarlovadas las galeras unas con otras*. ... y luego el almirante En Roger, *metiendo remo*, de intento, les dejó armar y prevenirse (Ch. 83, 152). And in English: "they began to enter the harbour, *formed in line*, and *all the galleys lashed together*. ... the admiral En Roger, *raising the oars*, let them put on armour and get ready (Ch. 83, 191).

The verb *affrenellar*, which occurs in Corral Llança's address in the phrase "*així com estan affrenellades totes quatre les galees*," will be the principal object of inquiry in what follows, although it will be useful to comment on other, less problematic vocabulary first. We may nonetheless note that the notion of 'check, restrain' and the image of the 'bridle' (cf. Latin *frenum* 'bridle') that underlie this technical term seem subject to some semantic slippage when it is first rendered in Castilian by *amarrar*, which loses the figure of the bridle and would here seem to mean 'moor', and then rendered into English as "roped together," again without a figurative dimension.

In Muntaner's description of Roger's first naval encounter (the second excerpt above) we meet the verb *desarborar*. Based on *arbre* 'tree' in the sense of 'mast,' it refers to the lowering of the masts, the sense captured in Castilian *desarbolat*. But in English we should

speak of *unstepping* the mast, rather than of *unshipping* it, as Lady Goodenough would have it, which would literally refer to its removal from the ship. Storage of the lowered masts (and bundled sails) gave more room for maneuvers on deck, and also protected them against possible damage. Muntaner's *scarpir* (MS var. *scarpir la cuberta*) is idiomatically rendered *clear the decks*, the deck being viewed as the covered area of the hull. Castilian *hacer zafarrancho* omits the specific reference to the deck but is the exact Castilian idiom.<sup>5</sup> In a further reference to bridling (*afrenellades*) the galleys are now described as *embarbotades*. Neither the Castilian nor the English translator explicitly addresses this verb, still current in Catalan as *embarbotar* in the sense of 'prepare, make dispositions, arm.'<sup>6</sup> We may then conclude that the verb describes the galleys as readied for action and is complementary to the phrase *apparellats de batalla*.

Lady Goodenough's rendering then makes a serious error in taking its cue from the Castilian *abarlovadas todas entre sí* when expanding on and translating *afrenellades* as *lashed together and hauling the wind*. Still leaving this question of lashing for later, fuller discussion, Castilian *abarlovar* is a complex term whose history Corominas has laid out.<sup>7</sup> Whatever continuing problems with its etymology, the basic meaning is 'lie to' in the sense of the full or near axial alignment of two objects. It could be used of a ship coming along side a quay or another vessel. It was also used of a tacking operation, where the ship would be sailing not into the wind but as close to it as its sails and rigging permitted. But in Muntaner's text there is no reference to the wind or sail, or even to movement, so that the English *lashed together and hauling the wind*—the latter somehow with an unstepped mast!—is very wide of the mark as concerns the actual situation, which is that the Aragonese fleet advances in close, parallel formation, under oar power we must assume, to engage the enemy.

But the Pisan vessels decide not to engage and leave their formation: *van eixir de la esquera*. *Esquera* refers to more than simple alignment so that the Castilian *salieron de la línea* and English *left the line* do not give the full picture. *Esquera* is derived by Corominas from Germanic, perhaps Frankish, *skar* via Old French *esquiere* (cf.

5. Like so much of nautical lexis, the word has an interesting origin; see Corominas *DCECH*, 6: 28–31, s.v. *zafar*.

6. *DCECH* 1: 504, s.v. *barba*. The semantic extension from 'beard' is not accounted for, unless we understand that beard growth equates with preparation (for manhood).

7. *DCECH* 1: 513f., s.v. *barlovento*. Old French *lof* 'luff,' initially a piece of gear used in tacking, then the weather edge of the sail and, indeed, of the ship itself, is likely of Scandinavian origin, as Corominas suggests (see now Sayers 2003), but I would not trace the *-lo-* element to this source. Italian *sottovento* may have played a role in the evolution of *barlovento*.

Old Provençal *esquiera*, Italian *schiera*) and means 'battalion, battle formation,' which might well entail more than a single line, although it is indeed one line of ships that should be envisaged here (cf. the phrase *meter se en escala*, Ch. 113). The Pisans then raise their masts (*arbolaron*), deploy their sails, and flee by picking up the wind in the roads beyond the Gulf of Nicotera, as I would translate *en redon*, *ab lo vent*.<sup>8</sup> Here again the translators mishandle the (admittedly difficult) Catalan idiom, with *cinjendo el viento* and *hauling the wind* both wrongly implying sailing close to a headwind, a maneuver unlikely to have been adopted by a ship in flight, where speed, not course, was paramount.

The third passage quoted above describes Roger's decision to wake the sleeping enemy from his fleet's strategic position across the the mouth of the Grand Harbor of Malta: "e començaren a entrar esquera feta per lo port, totes enfrenellades les unes ab les altres." Again the Castilian translator settles for a line (*en línea*) rather than a formation, and the English version follows suit (*formed in line*). Roger's final command, before hostilities begin, is that the oars be raised (*llewant rem*). This must imply more than simply raising the oars from the water, which would also entail near cessation of forward movement. Their subsequent disposition is a matter vital to our understanding of bridling, to which we now return.<sup>9</sup>

There is good reason to believe that Muntaner's verb *afrenellar* derives from the vernacular and medieval Latin of the Italian city states: *frenello*, *frenellum*, and from an etymological perspective we may standardize the Catalan form as *enfrenellar*, as does Joan Coromines in his discussion of the word, where we note that these

8. *DECat* 7: 366, s.v. *roda*. Coromines relates a number of terms and usages to his base entry for *roda* 'wheel.' Yet in the Catalan phrasing there are echoes of French *roder* in the sense of 'drive about' and of English *road*, later French *rade*, in the sense of a place of anchorage outside a harbor (Sayers, "In Troubled Etymological Waters," forthcoming). Finally, *roda* was also used in Catalan of the curved part of the prow of a ship above the water line. Here I understand *en redon* (MS vars. *en roda*) as referring to the open water beyond the Gulf of Nicotera. In Chapter 83 (736), we read: "los dos llenys qui estavan en roda enmig de l'entrada del port," which supports this reading (cf. *en roda*, Ch. 129, 787, *meter se en redon en mar*, Ch. 130, 789).

9. The kinds of errors noted in the Castilian and English translations are also evident in German, French and, to a lesser degree, Italian versions (Muntaner 1842, based on an edition of the same year; Muntaner 1827; Muntaner 1984). This last scene and the subsequent engagement may also be viewed through the eyes of Muntaner's contemporary Bernat Desclot (Desclot 1971, Ch. 113, 503f.). Desclot uses a rather different vocabulary from Muntaner's, one less specific to the sea and ships, and the image of bridling is absent. Desclot's account was published in English by F. L. Critchlow in 1928-34; see Ch. 41, 143f. The translation is generally more accurate than Lady Goodenough's, but the language is needlessly stilted, in an effort to recapture a "historical flavor."



Catalan chronicles of the thirteenth century offer the first instances.<sup>10</sup> This technical term is not glossed by Muntaner with any expansion and we must speculate on just what was entailed. But it should be noted that the image of the bridle means that the galleys were held in check, as would be a horse, and that "lashed together", implying firm unions (whether by cables or other means), looks dangerously like an overreading. There is no hint that oars were in any way involved, at least in a way that contributed to the creation of the bridle.

Pryor's speculation that bridling "may originally have been a Genoese innovation of the late twelfth or early thirteenth century" is unsupported by any explicit reference, but is conceivable that the author had in mind two works from the fourteenth century. The first is a collection of poems by an anonymous Genoese writer of the early fourteenth century (*l'anonimo genovese*). In a poem celebrating the victory of the Genoese over the Venetians at the battle of Curzola (1298), he writes of the Genoese fleet:

e se missem tuti in schera  
enter l'isora e terra ferma,  
de tuti cavi ormezia,  
enter lor afernelai:<sup>11</sup>

And the galleys all joined up in battle formation between the island and the mainland, moored by all their anchor cables between their bridles.

But related imagery also figures in a long moral exemplum in a different poem:

Stagando atenti a xivorelo  
tegnendo ben reme in frenelo,  
per encazar o per seguir  
o se pareise de fuzí. (Poem 39, 245)

The editor interprets these verses to mean "paying attention to the the alarm whistle [of the bosun's pipe] and holding the oars firmly checked in order to be ready for every maneuver." These verse passages might seem the origin of the scholarly association of bridles with oars as well as with ships, but there is perhaps even more determining textual evidence in the *Liber secretorum fidelium crucis* of the Venetian propagandist Marino Sanudo ("the Elder") Torsello, who endeavored to promote interest in a crusade against Egypt.<sup>12</sup>

10. *DECat.*, 4: 179, s.v. *fre*.

11. Anonimo Genovese, Poem 49, ll. 244-47.

12. See Tyerman and the brief account in Cristea.



Sanudo credits the Genoese victory over the Venetians at the battles of Lajazzo (1294) and Curzola not to superior vessels or greater numbers but to tactics, which included bridling ships and running gangplanks between them.

Galeae vero Ianuensium praedictorum, minores & debiliores galeis suorum hostium existebant, quae prope terram morantes tenebant proras paratas vel armizatas in contrarium dicti venti; atque omnes una simul frenellatae inuicem & ligatae: habebantque pontes, quibus ab una galearum in alteram ire poterant homines et redire.<sup>13</sup>

In a passage only a page later in the sole edition of this work, Sanudo, in part extrapolating from Genoese successes, offers advice for future naval encounters between crusaders and Muslims.

Praetera est necessarium & utile dictae genti, quod dicte galeae sint tali modo & maniere Frenellatae, quod dum adversus hostiles processerint pugnaturae, de facilli stringant se invicem & conjungant. Ita tamen quod gyrones mittant in Frenella remiges praedictarum, ne aliqua ex galeis hostilibus, intra fidelium galearum aciem, se figere valeat ullo modo. (84)

From the first extract we learn of the advisability of having the vessels linked one to another, "bridled" as we have seen in the Catalan chronicle, and further joined by gangways that would permit the movement of men between ships.<sup>14</sup> The composition of these *pontes* is not indicated.

In the second extract future crusaders (the "dictae genti") are again advised to link their ships together, one assumes with cables since other material is not named. Further, the rowers are to put their *gyrones* ... in *frenella*—leaving this phrase provisionally in the original—so that Muslim ships cannot slip through the battle line of Christian ships. The *gyrones* of this passage were perhaps first correctly identified in the modern era (1848) by Augustin Jal in his monumental and long authoritative *Glossaire nautique* as a Venetian term for the looms or handles of the oars. In a long expansion on the passage from Sanudo, Jal introduced the notion of the oars being reversed, since the looms were stronger than the blades, returned to the thole pins, and extended and lashed to neighboring ships. But it is noteworthy that this interpretative extrapolation has not been retained

13. Marino Sanudo, Book 2, Part 4, Ch. 24, 83. On Genoese naval warfare, Airaldi, despite the title, "The Genoese Art of Warfare," provides no information relevant to present concerns.

14. In *De re militari* Vegetius makes no mention of lashed oars but recommends the use of "bridges" to board enemy ships (Bk. 4, Ch. 44).

in the revised edition of Jal (*Nouveau glossaire nautique*), where the entries for *frenellare* and *frenellum* simply quote Sanudo.<sup>15</sup> What we have in Sanudo's second passage, I contend, is a mental echo—the mention of the very concrete, albeit flexible, bridles (*frenella*) between the ships of the fleet prompting the writer to an idiom of holding the oars in check and in readiness for an enemy movement.

Rodgers's dense description of the interior of a galley will provide a broader context for the above comment on checking the oars and will help us envision the difficulties attendant on the putative maneuver of reversing the oars and lashing them to an adjacent ship. Venetian evidence is fullest and we must allow for some minor differences on the Sicilian-Aragonese vessels, also as concerns terminology.

The deck was about 2 feet above the water, with much "crown" or slope from center to side. Higher than the deck was the "telaro" which carried the oars and their tholepins and transmitted the rowers' efforts to drive the ship. The telaro was a rectangular frame of heavy timbers, about 22 feet wide, carrying 60 oars on a side, and was somewhat longer than the rowing chamber which was about 105 feet long. It was composed of two thwartship timbers called "yokes" at opposite ends of the rowing chamber, which were strongly bolted to the ship's deck. The ends of the yokes were joined by longitudinal timbers called "apostis," which carried the oars and themselves rested on a system of knees bolted to the deck and overhanging the side like the outriggers of present racing shells.

Above the deck, along its center ran the "corsia," a vertical longitudinal member of the frame in two parallel webs which stiffened the ship structure and made the principal upper longitudinal girder. Between its two webs there was room for stowing sails and other gear and the grating above it made a runway for passage fore and aft. On each side of the corsia were 30 rowers' benches, each seating two men. They were not at right angles to the keel, but inclined so that on each side the inboard rower with the longer oar sat somewhat farther aft than his companion.<sup>16</sup>

This general understanding of the layout and operation of galleys under oars is confirmed in John E. Dotson's (2004, 1029) recent summary account of galleys and in Laures's discussion of Aragonese warships and tactics, with particular attention to oars and rowers.<sup>17</sup> It is in this shipboard environment, then, that we must imagine oar

15. Jal 1848, 720, s.v. *frenellare*; Jal 1888, 694-95, s.v. *frenellare*, *frenellum*.

16. Rodgers 111. Rodgers draws extensively on Manfroni. See, too, Alertz, especially 148-51.

17. Laures 19-29. Laures also examines the Aragonese evidence for the occasional use of a third oar and rower per bench (20-24) but perpetuates the fiction of lashed oars (25).

handling. Another commentary on rowing on Venetian galleys will be illustrative. The author has described the layout of the rowers' benches and the rowers' movements (in the Venetian setting, the standing rower pushing the oar ahead of himself), and then goes on to mention heavy seas, when rowing became impossible.

In this case, the oars were raised in such a way that the blades were out of the water but their collars [looms, handles, are meant] were firmly blocked at the base of the central passageway, thus said to be *aconigliati* or a *pettine* (like a comb).<sup>18</sup>

Here, I must conclude, we have the origin of the association between oars and *frenella*, which are in this case not the cables holding ships' prows but rather a loop, wooden lock, or other device that held the looms (Sanudo's *gyrones*) so that the raised oars were free of the water but secured, ready to be returned to the rowing position with a simple action carried out in coordination by the rowers. And the image of the horse and bridle seems quite appropriate for the the end of the loom and its retainer.<sup>19</sup>

To confirm this understanding by broadening our perspective at this point, we met the idiom *tenere reme in frenello* in the Genovese poem from the early fourteenth century. The very same image is found almost three centuries later in the captive's account of time at sea in Ch. 41 of Cervantes's *Don Quijote*, attesting to its continued currency in Iberian Romance:

... que estando ya engolfados y siendo ya casi pasadas tres horas de la noche, yendo con la vela tendida de alto baja, *frenillados los remos*, porque el próspero viento nos quitaba del trabajo de haberlos menester, con la luz de la luna, que claramente resplandecía, vimos cerca de nosotros un bajel redondo, que, con todas las velas tendidas, llevando un poco a orza el timón, delante de nosotros atravesaba; y esto tan cerca, que nos fue forzoso amainar por no embestirle, y ellos, asimesmo, hicieron fuerza de timón para darnos lugar que pasásemos.<sup>20</sup>

18. *La flotta di Venezia* 32.

19. There is no mention of improvised gangways or fighting platforms composed of oars in such authoritative works as Manfroni (for an account of the Battle of Malta, see 12: 90-93) or Rodgers, nor in briefer summaries such as Dotson. Under "Tactical Customs" Rodgers simply states: "Frequently, when the fleet was near shore, the ships were bridled for battle; that is, they stretched cables from one ship to the next, so that the enemy could not break through the line. These cables had to be cast off to retreat or pursue, but it was possible to advance when bridled" (116). Rodgers is here echoing Manfroni (1: 475).

20. Cervantes 286.

This is not to deny that oars could not on occasion have been reversed and run between ships to permit the passage of men. But we must recognize the complexity of such a maneuver: 100-150 oars, two or three per bench, different in length (some up to 32 feet), and in this imagined maneuver most practically raised in the air rather than drawn in to the central area of the hull so as not to impede the same operation at adjacent and opposite oar ports, then reversed and refitted between the thole pins. Even if there existed some drill to perform these actions in sequence, it cannot have been accomplished with efficiency on the spur of the moment. Further, it should be borne in mind that such an impromptu gangway, unless overlaid with other planking, would have had large gaps, equivalent to the distance between the oar locks, would have offered little upper surface even for the most sure-footed, and would still have obliged men to mount the gunwale from the deck and then move across the *apostis*, surely a risky business on bobbing vessels while under enemy fire. The lightly armed Aragonese *almogàvers*, accustomed to ship-board service and combat, might have managed this, but they are unlikely to have attracted their opponents to such an environment for hand-to-hand fighting.

Thus it would appear that Sanudo's juxtaposition of bridles, a recollection of possible classical antecedents,<sup>21</sup> Jal's overreading, and approximate translations from Catalan have created an imaginary situation, in which raised oars, held in check at their looms, have been transformed into a set of narrow, parallel beams (in the gymnast's sense), run between, and lashed to, adjacent ships. To abandon this fiction and recognize two kinds of bridle, if we choose to retain this term, *enfrenellar*, when used of ships and as a naval tactic in Muntaner, then means—and means only—galleys joined at stem and stern with cables. This alone would not have prevented the through passage of an enemy vessel, which might be thought capable of riding over a cable when the random movement of the ships left it temporarily submerged, but rather kept the Aragonese-Sicilian galleys at a fixed, close, and equal distance from one another in order to discourage any such attempt to break through. The deployment of the oars would have been a further dissuasion. Bridling or restraining the oars entailed their being lifted from the water and, most practically, held roughly balanced on the *apostis* or rowing beam

21. Concerning the ships laying siege to Syracuse, we note: "iunctae aliae binae quinqueremes demptis interioribus remis, ut latus lateri adplicaretur, cum exteriore ordine remorum velut una navis agerentur" ("other five-bankers, paired together, with the inner oars removed, so that side was brought close to side, were propelled by the outer bank of oars like a single ship"); Titus-Livy, Bk. 23, section 34.

horizontal to the surface of the water, thus justifying the Venetian image of a double comb and its teeth. Such horizontal restraint would also mean that the looms could be held from below by simple loops of rope attached to the *corsia*. Recalling Sanudo, we must recognize that his mention of *gyrones* is not a metonym for the entire oar, but refers very precisely to the part that receives the *frenellum*. This arrangement, too, would discourage an enemy vessel from trying to pass between two adjacent galleys, since the oars would sweep down men, damage castles, stems and sterns, the sharp ends of broken oars would be a hazard, etc. Such raising and bridling of the oars would also mean that there would be little ship-to-ship action laterally amidships and, indeed, descriptions of hand-to-hand combat, once the exchange of missiles has been completed, are restricted to the raised areas at the prow (the *taula*) and poop (Muntaner 1971, Ch. 130, 790; Mott "Iberian Naval Power," 2003, 107). Oars raised and locked in this fashion would also have permitted galleys on other occasions to advance with less than the full complement of rowers at work, evidence for which we find elsewhere in the Catalan chronicles.

With this proposed understanding of naval tactics, we may examine a fresh passage from Muntaner. These later events from the War of the Sicilian Vespers, taking place in 1285 off Roses, are initially seen from the Angevin perspective. The two kinds of bridling will be clearly recognized. One must have been frequent, e.g., when winds were favorable and rowers could rest their oars, the other specific to battle, but they are complementary in the tactical decision. My translation follows.

E tantost En Guillem de Loderva féu tocar les trompes e les nàcares, e féu armar tothom. E entretant lo jorn se féu, e les unes galees veeren les altres; e En Guillem de Loderva féu donar volta a les palomeres, e féu la via de les onze galees. E les onze galees estaven ben fora, per ço que no fossen près de terra. E En Guillem de Loderva venc a les onze galees ab quinze de les sues, enfrenellades, davant; e hac ordonat que les deu galees los venguessen per popa, e així que les tendrien enmig, en guisa que no en pogués neguna escapar; e segurament ordonà-ho sàviament. E En Ramon Marquet e En Berenguer Maiol feeren [metre] en frenells llargs les galees, e metre tots los remes en frenells, per ço que los enemics no es poguessen entre ells metre. E con ells se volguessen, que es donassen los remes de llarg, e que los ballesters en taula los canscassen, e con veurién que els haurien ben canscats, que donassen los remes de llong, e que s'acostassen a manés; e així se féu. E per cert vull que cascuns sàpia, e diu-vos-ho aquell qui en moltes batalles ho ha vist, que els ballesters en taula s'emporten les batalles pus les galees meten remes en frenell. ... E així les galees estaven proa per proa, e les altres deu qui eren de popa, e no podien entre ells entrar per los remes qui estaven ben enfrenellats. (789-90)

[And at once William of Lodève had the trumpets and kettledrums sounded, and had everyone arm. Meanwhile, day dawned and the one fleet of galleys

saw the other. And William of Lodève had the anchor cables wound, and made for the eleven [Aragonese] galleys. And the eleven galleys stood well off-shore, so that they should not be too close to land. And William of Lodève advanced on the eleven galleys with fifteen of his own, bridled together, in front, and had ordered the [remaining] ten galleys to follow them astern, so that they could hold them [the Aragonese galleys] to the middle, in such a way that none of them could escape past. And surely this was a prudent command. And Ramon Marquet and Berenguer Maiol ordered their galleys linked by long bridles, and had all the oars raised and blocked, so that the enemy vessels could not come between them. Then, when they wished, they would release the oars when the crossbowmen on the foredeck had assaulted them, and when they saw that they had them well ground down, they would row in from the intervening distance, and would close with them in hand-to-hand combat. And this was done. And I should certainly like everyone to know (and the one telling you this has been in many battles) that it is the crossbowmen on the foredeck who carry the battle once the galleys put their oars in bridles... And so the galleys stood prow by prow, with the other ten astern, and they could not penetrate between them because of the [extended] oars that were well bridled.]<sup>22</sup>

Between the two excerpts above, focused on bridling, Muntaner gives his celebrated account of the Catalan crossbowmen, their profound knowledge of their weapons and deadly efficiency in battle.

We shall continue to explore the details of naval architecture, sailing, rowing, and armed encounters in the thirteenth-century Mediterranean and will be alert to the multiplicity of possible origins for such detail: in the traditions of Iberia and Provence, in the powerful maritime states of Italy such as Genoa, Pisa and Venice, in Sicily and the Greek and Muslim fleets of the eastern end of the Mediterranean basin. The study of this vocabulary, as readily transferred across political and linguistic frontiers as the technology it denoted, must be central to this endeavor. The medieval ship was arguably the most complex machine of its age, but it need not be made more complex by the invention of imaginary parts or shipboard practices that strain credulity. The Catalan vocabulary for naval tactics, perhaps like those tactics themselves, is largely derivative, with Italian the chief source. But just as Roger de Llúria deployed so much of this praxis to advantage, some terminology took on relatively discrete form in Catalan, in particular the practice of bridling ships, for which we have the term *enfrenellar*, a verbal form unmatched in neighboring

22. In a note to this passage (969, n. 6) the modern editor of Muntaner's chronicle calls this one of the most explicit passages for understanding the tactic of bridled galleys, but still fails to recognize what the bridling of oars entails, believing that short bridles were run from the oars of one ship to those of another. Comparable mention of bridled then released oars in Ch. 113 (770).



languages. But all this lexicon was certainly at home in Catalan and comes readily to the pen of Ramon Muntaner, eyewitness to so much of what he recounts.<sup>23</sup>

In conclusion, we owe it to Muntaner to take an informed second look at his account of Roger de Llúria's first encounter and entry into the Grand Harbor of Malta, and to render it as clearly in English as it was written in Catalan.

And this the admiral did particularly as it was the first battle that he would fight since he had been made admiral, and thus he wanted to display his boldness and the competence of the fine forces that were with him. And he had the trumpets and kettledrums sounded and they began to enter the harbor in battle formation, each galley bridled to the next with cables. And the Provençals woke up at the terrible sound and at once the admiral En Roger, ordering the oars raised [and blocked] throughout the fleet, had them arm themselves and prepare for battle.

WILLIAM SAYERS  
CORNELL UNIVERSITY

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23. Some additional problems of Muntaner's nautical vocabulary will be addressed in a future article. The conception of bridling and galley oar deployment that has been advanced in this article will also be tested against accounts in French and Dutch of the Battle of Zierikzee (Zeeland) in 1404.



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